

**Supplemental Material: Organophosphate Pesticide Exposure and Attention in Young Mexican-American Children: The CHAMACOS Study**

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**Supplemental Materials, Table 1. Mean  $\pm$  SD scores for continuous attention-related outcomes at ages 3½ and 5 years, by sex.**

Outcome	Total		Boy		Girl		t-test p-value	
	n	mean $\pm$ SD	n	mean $\pm$ SD	n	mean $\pm$ SD		
<b>3½ YEARS</b>								
<b>CBCL</b>								
Attention problems	330	2.8 $\pm$ 1.6	151	3.1 $\pm$ 1.6	179	2.6 $\pm$ 1.5	0.004	
ADHD	329	5.4 $\pm$ 2.7	151	5.6 $\pm$ 2.8	178	5.2 $\pm$ 2.6	0.17	
<b>NEPSY</b>								
Visual attention	319	8.9 $\pm$ 2.3	143	8.8 $\pm$ 2.2	176	8.9 $\pm$ 2.4	0.64	
<b>5 YEARS</b>								
<b>CBCL</b>								
Attention problems	322	2.5 $\pm$ 1.7	154	2.8 $\pm$ 1.7	168	2.2 $\pm$ 1.6	<0.001	
ADHD	322	4.7 $\pm$ 2.9	154	5.1 $\pm$ 3.0	168	4.3 $\pm$ 2.7	0.01	
<b>K-CPT</b>								
ADHD Confidence Index	297	45.9 $\pm$ 17.4	140	49.0 $\pm$ 15.2	157	43.1 $\pm$ 18.8	0.003	

Abbreviations: ADHD = attention deficit hyperactivity disorder; CBCL = Child Behavior Checklist; K-CPT = Kiddie Continuous Performance Test; SD = standard deviation

**Supplemental Materials, Table 2. Adjusted<sup>a</sup> logistic models for attention-related outcomes at ages 3½ and 5 years per 10-fold increase in prenatal urinary creatinine-adjusted DAP concentrations.**

Model	n <sub>outcome</sub> / n	DAPs OR (95% CI)	DMs OR (95% CI)	DEs OR (95% CI)
<b>3½ YEARS</b>				
<b>CBCL</b>				
Attention problems	17/330	2.3 (0.6, 9.0)	1.8 (0.5, 5.7)	2.5 (0.7, 9.0)
ADHD	18/329	1.8 (0.5, 6.3)	1.7 (0.6, 5.4)	0.8 (0.2, 2.7)
<b>5 YEARS</b>				
<b>CBCL</b>				
Attention problems	13/322	0.5 (0.1, 2.4)	0.4 (0.1, 1.9)	1.3 (0.3, 6.1)
ADHD	23/322	0.8 (0.2, 2.5)	0.8 (0.3, 2.3)	0.9 (0.3, 2.8)
<b>K-CPT</b>				
<b>Markedly atypical</b>				
% Omissions	59/312	1.5 (0.7, 3.2)	1.3 (0.6, 2.6)	1.8 (0.8, 3.8)
% Commissions	54/312	0.8 (0.4, 1.9)	0.7 (0.3, 1.4)	1.0 (0.5, 2.2)
Hit reaction time	20/311	2.1 (0.6, 7.0)	1.9 (0.6, 5.9)	1.4 (0.4, 4.4)
<b>ADHD Confidence Index</b>				
>70th percentile	25/297	3.2 (1.1, 9.6) *	2.1 (0.8, 5.8)	4.4 (1.5, 13.1) **
<b>Hillside Behavioral Rating Scale</b>				
Attention ≥7 of 12	23/322	1.6 (0.5, 5.1)	1.7 (0.6, 4.7)	1.3 (0.4, 4.0)
<b>Composite ADHD Indicator</b>				
ADHD Indicator	27/319	2.6 (0.8, 7.8) †	2.3 (0.9, 6.3) †	1.2 (0.4, 4.0)

Abbreviations: ADHD = attention deficit hyperactivity disorder; CI = confidence interval; DAPs = dialkyl phosphates; DEs = diethyl phosphates; DMs = dimethyl phosphates; K-CPT = Kiddie Continuous Performance Test; OR = odds ratio

<sup>a</sup>Controlling for psychometrician, age at assessment, sex, childcare, breastfeeding, & maternal education, depressive symptoms, PPVT

† p<0.10; \* p<0.05; \*\*p<0.01

**Supplemental Materials, Table 3. Adjusted<sup>a</sup> linear models for attention-related outcomes at ages 3½ and 5 years per 10-fold increase in prenatal urinary creatinine-adjusted DAP concentrations.**

Model	n	DAPs β (95% CI)	DMs β (95% CI)	DEs β (95% CI)
<b>3½ YEARS</b>				
<b>CBCL</b>				
Attention problems	330	0.5 ( 0.0, 0.9) *	0.5 ( 0.1, 0.9) *	0.1 (-0.3, 0.6)
ADHD	329	0.7 (-0.1, 1.5) †	0.8 ( 0.1, 1.4) *	0.0 (-0.7, 0.8)
<b>NEPSY</b>				
Visual attention	319	0.2 (-0.5, 0.8)	0.0 (-0.6, 0.6)	-0.2 (-0.8, 0.4)
<b>5 YEARS</b>				
<b>CBCL</b>				
Attention problems	322	0.5 ( 0.1, 1.0) *	0.4 ( 0.0, 0.9) *	0.2 (-0.2, 0.7)
ADHD	322	1.1 ( 0.3, 1.9) **	1.0 ( 0.2, 1.7) **	0.5 (-0.3, 1.3)
<b>K-CPT</b>				
ADHD confidence index	297	2.8 (-2.5, 8.0)	1.5 (-3.3, 6.3)	2.7 (-2.4, 7.8)

Abbreviations: ADHD = attention deficit hyperactivity disorder; CI = confidence interval; DAPs = dialkyl phosphates; DEs = diethyl phosphates; DMs = dimethyl phosphates; K-CPT = Kiddie Continuous Performance Test; OR = odds ratio

<sup>a</sup>Controlling for psychometrist, age at assessment, sex, childcare, breastfeeding, & maternal education, depressive symptoms, PPVT

† p<0.10; \* p<0.05; \*\*p<0.01